ATTACHMENT 7 TO SUPPLEMENTAL DECLARATION OF C. MICHAEL PFAU AND JULIE S. CHAMBERS

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MR. CRUZ: Welcome, everyone, to the broadband UNE CLEC forum. This meeting is a genesis for several different conversions and activities in our industry. Specifically one of the biggest ones from our perspective is SBC's investment in the PRONTO architecture and fiber build-out that we're going to deploy over the course of the next three years. And so the purpose of this meeting is to inform the CLEC community of how -- what SBC's unbundled plan will be with respect to that architecture.

In addition to that, I think we have a lot of other activity going around us such as UNE Remand. We also have the high demand for the DSL service which I think could also be, you know, utilized to deliver over this architecture, et-cetera. So, we've had a lot of requests from a lot of our customers, and we've had a lot of interest in this topic and discussion, so we thought instead of having several one-on-one conversations. we'd have one big forum to discuss the entire, you know, plan and product description. And we have a fairly detailed outline hopefully in front of you

that you guys can review as Chris Boyer, who will be

presenting the information for you today, will

ask you to hold your questions, maybe jot them down so we don't forget them, and either -- hopefully Chris will cover them in the presentation, or at the end of the presentation we have some time allotted to go over some Q and A's with you guys that hopefully will address any outstanding questions you may have.

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So, when we do that, please be conscious that we do have a court reporter here. We'd like for you to, you know, be very clear with your name and also the company you're representing so that we can also capture that for posterity. In addition to that, if you guys haven't been able to notice, we do have a video camera going as well, and so that will be another media distribution that we can use to share the outcome of the meeting as well.

So, without further ado, I'd like to turn it over to Chris Boyer who will cover the material with everyone in the room. Thank you.

MR. BOYER: Hello. I'm going to start off with by reading some information related to the video cameras here in case if anyone is curious as to why we are videotaping this conference. Basically we got a request late

25 yesterday by one party that wanted to record this.

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discuss.

My name is Rod Cruz and I do work for SBC and I have wholesale marketing or product management responsibilities. I do work on DSL product and also this, what we're calling this broadband UNE or UNE on steroids as I like to reference it, and so that gives you a perspective on my background.

Just some logistics for now. We plan on taking breaks about every hour because this information's going to be lengthy and detailed, and so we're going to take a break about every hour on the hour. If you guys aren't familiar with the facilities, I believe the ladies' rest room is to my right and the men's rest room is down the hall. There's also a couple of telephone banks also to the right and the left if you guys need to make your calls and don't have a wireless with you.

calls and don't have a wireless with you.

In addition, we have a couple of other activities going on. We have a court reporter that's here that's going to create a record and a transcript for distribution of this meeting for anyone that hasn't or is not present and would like to review it at a later time. So, as you -- I think the format will be that we're going to discuss this over the next few hours and if we could just maybe

While we don't have any problem allowing people to keep a record of what is said during the meetings whether it be video or transcript, we think all

whether it be video or transcript, we think all parties should have an opportunity to do that.

In order to ensure that everybody has a fair opportunity to do such, there needs to be arrangements made in advance of the meeting for that. It is not reasonable to call the day before and expect it to be able -- that request to be able to be accommodated. However, we are in an attempt to be as candid as possible trying to share our best information about where we are heading.

We recognize that this is something we are all learning about both technologically as well as from the regulatory perspective. This is subject to change so that the positions we are taking are subject to whatever further refinements we would think be appropriate based upon the learnings from actual experience and deploying this because it is something that has never been done before and we do

- 21 expect that we will learn over time about issues and 22 problems that need to be resolved and addressed.
- 23 Moreover, all of this is subject to regulatory
- proceedings in a number of forums and our positions,
 - as I'm sure our opponents', may change as we get

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instructions from the regulator.

So, that's the -- I wanted to read that to initiate the meeting. We have had request for the video, so that's the reason why the video camera is here. And as Rod had addressed before, copies of the videotape and also the transcript will be made

available upon request, so --To move forward, what I'm going to do is I'm going to present the unbundling plan for PROJECT PRONTO, and I have a slide show that I'm going to present here. Basically an outline of what I'm going to talk about today is going to consist of and if we're going to introduce PROJECT PRONTO for those of you here who are not familiar with what that means. Following that I'm going to do at a very high level an overview of the infrastructure that we plan on deploying in conjunction with PRONTO, and I'm going to talk about what we commonly refer to as DLE, which stands for digital loop electronics, and I'm going to talk about the non-DLE or the traditional DSL infrastructure at a very high

9 10 11 12 13 14 15 16 17 18 19 20 21 22 level. This is not meant to be an extremely 23 technical discussion, but we're going to do a brief 24 overview of the infrastructure. 25 Following that discussion, I plan on

Page 8 SBC TELCOs to own some advanced services equipment

2 that in the merger conditions was specified as

3 belonging to our new subsidiary, ASI.

4 The reasoning behind that issue is that 5 there are several elements that are part of the DLE 6 infrastructure that are necessary for us to own if 7 we want to provide what we consider to be an 8 effective service to the CLEC community. So, as I 9 go through this -- as I go through this 10 presentation, I'm going to talk periodically about the reasoning as to why we are requesting this

interpretation. So, really the meeting has a dual purpose as it shows on this slide. We want to talk about that particular issue, and we also would like to

16 address the actual product itself for those of you 17 who are interested in purchasing the unbundled 18

elements represented under PRONTO. The last bullet 19 on this slide mentions assumptions. Our general

20 assumption in this product design is that the

21 telephone company will own the elements that we were

22 requesting the interpretation for, so it is subject

23 to change.

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24 Quick definition of PROJECT PRONTO. 25 Basically what PRONTO's designed to do is to

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presenting a few comments in regards to the SBC 2 request for interpretation of merger conditions which I think several of you are probably aware of that issue, and then I will get into the actual 5 unbundling plan, presenting the product that I am 6 developing. I am responsible for the development of the PRONTO unbundled elements, so I will get into 8 some details about the product itself. Following 9 that, I will present what we -- we are considering 10 for our high level service order flow that we are 11 developing in conjunction with these UNEs and get 12 into a little bit more detail about the product and

So, I will -- I would like to comment that most of this material is being developed by my product team as we speak. We still have several issues that we need to resolve, so any of this is subject to change in the near future. So, without further ado, I'm going to move forward.

how we're going to order and bill for it.

The first thing I want to talk about is the request for interpretation of merger conditions as part of the introduction. And for those of you who do not know, FCC has requested or SBC has requested that the FCC give us an interpretation of the merger conditions to allow SBC to own some or

Page 9 increase the reach of DSL services to end users. As

Rod had mentioned, we are deploying integrated

3 digital loop carrier systems or digital loop carrier 4

systems in new and existing remote terminals. The 5 reasoning for that is to shorten the loop length to

6 limit the impacts of loop conditioning and increase

7 the availability of DSL service. The unbundling 8

plan, the PRONTO unbundling plan is basically a work

9 effort that I'm heading up within wholesale 10 marketing along with Rod, and basically we are just

11 developing a plan to unbundle these particular 12 elements to make them available to the CLEC

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14 And a quick definition of DLE as I 15 mentioned, DLE refers to digital loop electronics. 16 That refers to a digital loop carrier system that is 17 deployed in the field that consists of fiber to 18 remote terminal. So, when I reference the DLE 19 environment, that is specifically what I'm referring 20

21 Well, the first thing I want to do when I 22 talk about infrastructure is I want to kind of build this up a little bit from the basic -- a basic 23 24 non-DLE or traditional DSL environment to what we

would consider to be our DLE environment. So, the

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non-DLE infrastructure is typically defined by a central office-based DSLAM, by UNE xDSL capable loops, just a traditional DSL service offering, and this diagram is intended to represent how I would envision a traditional service offering where you have an end user, you have a physical copper loop going back to a main distribution frame in a central office that is cross-connected to some DSL equipment that's collocated in the central office, okay.

There are some limitations on the non-DLE infrastructure. For those of you familiar with DSL, the availability of DSL service is limited by loop length and conditioning. There are several solutions to this problem, and I've listed some of them there. One would be to shorten the loop length by placing a DSLAM in the remote terminal. Another method, this method would require collocation of DSL equipment in new and existing CEVs and huts if space and environmental capacity's available. This would also require the purchasing of dark fiber from the serving wire centers to remote terminals where it's available. And it's also going to require the collocation of DSL equipment in the serving wire center.

So, those are all issues that would have

with the DLE infrastructure. What I'm going to do is I'm going to talk from the box that's labeled CPE all the way over to the left.

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From the customer premise, which I would assume would be the box labeled CPE, you will have a copper facility. The copper facility will go from the customer premise to an SAI box, which is just a cross-connect box out in the field. In the SAI box a physical cross-connect will be made from -- well, you could consider distribution copper to the end user's location to a feeder copper facility, and that will be a 25 or pair 50 -- 25 or 50 pair feeder facility that would go out to the SAI.

Once that cross-connect is made, that

15 customer's line will be integrated into an ADLU card 16 presence in the remote terminal. The ADLU card 17 itself is an ADSL line unit card that we place in a 18 digital loop carrier channel bank that's placed in 19 the RT. And at this present time we have chosen two vendors for the digital loop carrier equipment. We 20 21 are deploying the Litespan 2000, 2012, and we are 22 also deploying a UMC 1000 DLC system. So, at the 23 SAI box by making that cross-connect, that end 24 user's loop is picking up the DSL capability and

it's being run into one of these -- the ADLU card is

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to be resolved in order to shorten loop length under the existing infrastructure that we have deployed today in quite a few locations. The alternative solution to this is digital loop electronics or DLE.

If I'm going too fast, please tell me to slow down and I'll slow down.

slow down and I'll slow down. The elements that are necessary to provision DSL in the DLE environment are going to consist of remote terminal equipped with digital loop carrier systems, remote terminal combo cards or what we're calling ADLU cards which is an Alcatel card that provides a function very similar to a DSLAM. Also provides a splitter function splitting the voice signal from the data, remote terminal derived UNE sub-loops, digital loop carrier central office terminal equipment, a dedicated OC-3c transport facility for voice and another for data from the remote terminal to the central office, and an opt -- and what we are calling an optical concentrator devise for inbound data traffic in a central office and then access to ATM capacity by interoffice facilities. Those are the various

This diagram here is a high level diagram

elements that would make up DLE.

1 the card that's used in conjunction with the 2 Litespan, so it's run into this ADLU card, okay. 3 The ADLU card itself serves as a splitter device 4 splitting the voice signal from the data. 5 So, what this diagram shows is, is the 6 actual function -- is the actual splitting function 7 occurring at that card. And what it will do is 8 we're going to have a fiber that goes out from the

9 central office to the RT. We're going to have 10 dedicated fiber strands, an OC-3c dedicated fiber 11 strand for data and another one for voice. So, once 12 the signal hits the ADLU card and we split the voice 13 and data signal, it is piped over these -- over 14 their respective facility for voice and data. So, 15 you have a dedicated facility for data which means 16 that at that point in time they both are writing 17 different infrastructures within our network.

The actual signal from the remote terminal is the line that's labeled OC-3c for data terminates in a device that's called an optical concentration device. What the optical concentration device does,

it has the technical capability to take multiple
 incoming OC-3's from multiple remote terminals and

actually read the incoming packets so that we can
 take what would be lightly loaded OC-3's from RTs

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the outbound side.

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and concentrate them into a very densely-packeted OC-3 on the outbound side.

So, we expect the traffic from each remote terminal going back to the central office to be relatively light at the initial go of this product due to the fact that obviously our DSL penetration rate is not as high as we expect it to be in the future, and also because of the fact that the OC-3 pipe is such a wide or fat pipe that we're going to not -- that it will transport more traffic than we envision at this current time. So, you will have multiple signals from multiple end users over that OC-3c facility going into the OCD.

Now, we're looking at the plane multiple RTs per OCDs, so we might have anywhere from just off the top of my head maybe 15 to 20 remote terminals off of this one OCD. So, we could have 15 to 20 incoming OC-3c's for data that are going into that device. So, the idea behind the OCD is to take the packets from all those individual lightly-loaded OC-3's and use the OCD to read the packets, repacketize them and route them to a port on the outbound side.

So, what we're going to -- what we're going to do is, is we're going to have several ports

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1 collocation point or possibly a CLEC ATM switch or
2 ATM cloud in an adjacent central office.

Now I'm going to quickly run through some slides with you that I just talked about that define these various elements in paper so you have a copy of this when you leave the room. The optical concentration device, again, is a generic term for a device that takes a group of incoming OC-3's from multiple remote terminals or DSLAMS and then concentrates the signal into one or more outgoing OC-3's. The OCD cross-connect will take incoming ATM packets for multiple 0C-3's and multiple remote terminals, depacketize the incoming 0C-3, read the routing information on the individual groups of packets and then concentrate or repacketize these into outgoing OC-3's designated to a particular ATM

The ADLU common card is the card that splits the voice from the data and provides the functionality similar to a DSLAM. The OC-3c data transport is a physical fiber strand from the remote terminal to the serving wire center. This facility will transmit a dedicated facility OC-3c for data from the digital loop carrier equipment to the OCD. And again, it's designed to take multiple packetized

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switch.

that are handling inbound traffic from the RTs into the OCD, and we're going to set up what we're calling a virtual cross-connect. The virtual cross-connect will be in the OCD, and what it will do is it will allow a CLEC to come in and purchase a port on the outbound side of the OCD to take their individual traffic.

So, the way this would work is, is that if you had a DSL customer that purchased a DSL capable loop out of this infrastructure, their signal will be routed from the ADLU card where the voice and data is split. The data signal will ride this common fiber, this OC-3c transport facility into the OCD, and the OCD will be basically translated to have the intelligence to actually read your incoming DSL traffic to determine what the routing slip is going to be on the individual packets belonging to whatever CLEC has purchased this loop and then route it to a port on the outbound side. And we're going to allow the CLECs to come in and purchase ports on

So, once it reaches the OCD, the signal leaves the OCD on the outbound side and is routed to an ATM cloud of some sort, wherever it might be located at. In this diagram it shows a CLEC

data signals and transport those back to the central office.

The permanent virtual circuit. The permanent virtual circuit's going to be necessary to be provisioned both in the field in the digital loop carrier equipment and also in the central office. And by that I mean that in order for an incoming copper DSL loop to have access to the 0C-3 facility that goes from the RT to the CO, we're going to have to provision a virtual cross-connect in the DLC equipment. We're going to also have to provision one in the central office in the OCD. So, there's going to be -- really technically there will be two virtual cross-connects, one in the RT and one in the central office.

cross-connects, which are commonly referred to as permanent virtual circuits that we are offering are unspecified bit rate UBR permanent virtual circuits at this point. We are not offering constant bit rate PVCs at this point in time although we do -- we have had some consideration of offering this in the future. At this point in time we are only offering unspecified bit rate PVCs.

At this point in time the virtual

MS. SMITH: I'm sorry. What did you

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say you were not offering at this time? MR. BOYER: We're not offering a constant bit rate PVC. I'm sorry. I made that unclear.

The OCD port termination, it's going to be a physical termination on the OCD which at this point in time is going to be a CBX-500 ATM switch. That is the device we've procured for this particular function. And that physical port termination will either be at a DS3 or an 0C-3 level. So, if a CLEC purchases a port on the OCD, they will get either -- they will purchase at the DS3 or the OC-3 speed, and that is a technical limitation due to the switch at this point.

The OCD cross-connect, this cross-connect will be something that will be necessary to extend the port to the CLEC point of collocation. We'll extend it to your collocation point or we're going to extend the port to a DSX location in the central office to pick up whatever form of transport that the CLEC would wish to purchase.

That pretty much covers the infrastructure piece. Hopefully that was understandable to most of the folks here. The next thing I want to talk about very briefly is the SBC request for interpretation

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- 1 disclaimer on this. We -- by no means is this 2 intended to represent all of the different options
- 3 that are out there today. You know, and I have
- 4 listed on the few other slides some -- what we
- consider to be the pros and cons from both the CLEC 5
- 6 perspective and from the SBC TELCO perspective in
- 7 these different proposals but, again, it's not
- 8 intended to be an all inclusive list. I'm sure
- there -- our customers and other individuals may 9
- 10 have some additional points that they would like to

11 make on this particular proposal. 12

Basically the three proposals that we've considered are, the first proposal being that the CLEC owns the ADLU card and ships the card to the TELCO for placement in the remote terminal, okay.

- 16 The logic behind that being that the CLEC would have 17 to own the card to provide the DSL service because
- 18 that's what does the splitter functionality in this
- 19 infrastructure. The other logic being that the
- 20 TELCO still has the responsibility for the voice
- 21 service that we're going to offer over this line in
- 22 a line-shared environment, so we would have to place
- 23 the cards in our RTs.

24 The second proposal that we considered was 25 the CLEC owning what we would call an equivalent

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of merger conditions.

2 Now that I've talked about the infrastructure, in regards to the SBC request for 3 4 interpretation, the two biggest issues that we are looking at is that we have requested interpretation 5 to allow the SBC TELCOs to own the OCD and the ADLU 6 line card. The OCD itself is -- we have procured a 8 device, again, the Lucent CBX-500 switch which is an ATM switch. The ADLU line card is also considered 9 10 advanced services equipment because it provides the 11 splitter functionality, splitting the voice signal from the data. So, under the existing merger conditions, SBC would not be allowed to own those 13 cards which would force us to allow the CLECs 14 yourselves to actually own those cards and somehow 15

integrate them into our network. So, internally within SBC we have been having several discussions amongst various individuals to try to come up with a scheme that would allow us or would allow a CLEC to own those devices and physically place them and physically interact with our network that we're deploying. So, we've considered basically three different proposals within our company in relation to this issue. And I would just like to add a real quick

plug or a port level. And what this proposal really

- 2 was, what we call plug sharing or pooling. And
- 3 under this scenario, our proposal was that the CLECs
- 4 would purchase the cards, ship the cards to the
- 5 telephone company and we would put them into a pool
- 6 and we would allocate a -- allocate the ports
- 7 amongst all the CLEC community. Under the first
- 8 proposal, which I didn't point out before, was that
- 9 under this proposal the CLEC would have to ship us
- 10 the card, the TELCO would have to place the card,
- and in order for this to work, the CLEC would have 11
- 12 to identify the remote terminal they want the card
- placed in, they would have to identify the actual 13
- 14 end user customer loops they want tied into that
- 15 particular card. So, there were a lot of logistical
- 16 problems that were very difficult for us to iron out
- with the CLEC actually owning the card. 17 18

So, we went to a second proposal which was 19 this pooling arrangement. And the reason we wanted 20 to do the pooling arrangement was because, again,

- 21 those two issues I just pointed out in the first
- 22 proposal, but also the fact that with -- with us
- using SAI boxes out in the field, 25 to 50 pair of 23
- cables, each one of these cards can support two to. 24
- 25 four end users. So, what happens is, is that if you

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fill up an entire channel bank with these cards, you 2 exhaust capacity for that particular SAI box. So. by the CLECs owning the card, we can only put a certain number of cards out there in the RT, so if you -- if you own every single card, you may only 6 have one end user that's served out of that remote terminal but you have to buy a card that can support 8 either two to four end users. So, it becomes very 9 impractical for someone to have to purchase an 10 entire -- for someone to actually have to purchase 11 an entire card and then logistically for us to place 12 it out there and coordinate it with all of our SAI 13 boxes and end user loops.

14 So, the second proposal we considered was 15 Proposal No. 2 on here which talks about plug 16 sharing or pooling. Under this proposal we had 17 suggested that the CLECs actually own the card, ship 18 the card to the telephone company and that we would 19 place them -- we're going to fill up the RTs with 20 these cards out of a common pool and that would 21 allow us to allocate to the CLECs as many ports as 22 they provide to us on a card. So, for instance, if 23 you provided us what we call a dual port card that 24 serves two end users and you shipped us 50 cards, we 25 might be able to allocate you a hundred ports in all

1 develop new features for their cards. And of course you would have nondiscriminatory access via 3 unbundled network elements to your -- to those cards 4 that were placed in the RTs.

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5 From the negative side, again I talked 6 about the fact that there would be stranded 7 capacity, four ports per card in the future as they 8 are developed, and you may on the outset be only 9 using one port. A second negative would be the fact 10 that this would limit ADSL availabilities in remote 11 terminal due to capacity issues. I think the best 12 way to explain that is the fact that if we put a 13 channel bank out there that serves, maybe we can put 14 28 cards in that channel bank, if a particular 15 CLEC -- if CLEC A comes to us and puts a card in 16 there, they've just taken up 1/28th of the capacity

17 in that remote terminal, in that channel bank. 18 If CLEC B comes to us and puts a card in 19 there, they're taking up another 1/28th of that 20 capacity. It's not a very efficient way to allocate capacity on these digital loop carrier systems 21

22 because if CLEC A comes to us and is serving one end 23 user, they've still taken up 1/28th of the capacity

24 in that channel bank. Whereas if we go to the port 25 level, you would be only taking up one port. With

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of our various remote terminals under this particular proposal and that would alleviate the 3 problem of having to tie in one particular card with 4 each CLEC copper loop. In other words, you would 5 have access to multiple remote terminals for each 6 one of your ports, not at the card level. So, this is what we were calling an equivalent plug.

The third proposal that we've considered is the final one and the one that we're recommending for this particular scenario, and that is that the telephone company own the ADLU card and actually provide the functionality of that card to the CLECs as part of the UNE product that I'm developing. Of course, that would require us to get a interpretation from the FCC to allow the telephone company to own this card.

This slide here very quickly was put together to kind of list what we consider to be the pros and cons of the first proposal meaning the CLEC owning the card and the TELCO actually placing it. On a positive side, we considered the fact that the CLEC would actually control capacity and utilization for the cards. Being that you would own the cards, you would have the ability to control capacity and utilization. CLECs would have the capability to

Page 25 there being four ports per card or two ports per card, that might be 1/56th or 1/112th of the 3 capacity. So, from our perspective it's not a very efficient way to actually allocate capacity in the 5 remote terminals to actually have the CLECs own the 6 cards and tie them in.

The third negative that we looked at was the fact that the CLEC would obviously be required to invest in the ADLU cards. You'd have to purchase the cards and somehow ship them to us. The fourth one was some tax implications in maintaining inventory of cards to ensure availability. An additional negative that we saw was that this would require vendor contracts. And of course the last one and probably the most obvious issue would be the fact that CLEC ownership would lead to a very complex and expensive provisioning process for both the telephone company and for our customers that would clearly lead to a higher cost.

The second proposal that we are considering was the ADSU -- ADSL pooling arrangement or plug sharing. Again, some of the positives of this particular proposal are that it would allow nondiscriminatory access via UNE. The CLECs would

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be built for ports on the cards as opposed to the

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actual cards themselves. It would mitigate some of the stranded capacity impacts. It would allow CLECs to forecast their own demand, and we'd place the cards for you. It would still allow the ability for CLECs to develop new features on the cards, and it would maximize space by allocating ports as compared to slots.

Some of the negatives for this particular proposal, again, they're very similar to the first proposal I just discussed, that being the fact that there will be a cost for creating an administrative process for managing the pool. They'll still be billing for every port that's used. There are still some tax and investment implications that will be translated into cost. There are issues in regards to the CLEC actually shipping the cards to us, the telephone company confirming receipt of the cards and somehow keeping track and inventorying the ports and the cards.

And again, we have all the other issues related to the provisioning process itself that will lead to higher costs, longer intervals for installation of service. So, there's quite a few issues resolved to the first two proposals. So, 25 this leads me to the third proposal that was put

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SBC TELCOs will unbundle access the network elements 1 as defined by the DLE infrastructure which we will 2

3 do regardless of this situation, but this will

relieve space limitation problems of having to 4

5 collocate in remote terminals. CLECs will continue

6 to have the option of collocation as a means of

7 access to the unbundled elements or utilize some

8 form of facility to gain access to the elements

9 associated with DLE.

10 The third option is the fact that the 11 CLECs will continue to have the option to collate 12 DSL equipment in new and existing cabinets, CVs and 13 huts, that is if space capacity is available. CLECs 14 will continue to have the option to develop new 15 plug-ins with vendors if technically compatible to the SBC equipment over the infrastructure. And it 16 17 would allow everyone to avoid administrative costs 18 associated with plug or port ownership. 19

So, that pretty much outlines the infrastructure itself and the actual issues associated with the reasons why SBC has requested interpretation of the merger conditions by the FCC.

23 I think I'm going to take about ten, about 24 five minutes if that's okay at this point and then 25 we'll reconvene about -- we'll reconvene in five or

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together, and that is the fact of the TELCO actually owning the ADLU card. And again, this is the -this would require us to get an interpretation from the FCC to allow us to own the card.

This simplifies the process quite a bit for our purposes and also for yourselves in our opinion. Again, it provides nondiscriminatory access via unbundled elements. The card itself will be included in the UNEs that I'm going to present later on in this presentation. It would still allow CLECs to forecast demand. It mitigates all of our capacity concerns. We would still allow the CLECs to develop new features and cards, and we would actually put any type of new card as it becomes available in the remote terminal on a request. Wouldn't necessarily require a vendor contract. Would mitigate concerns over investment expense. It

developing the process. We wouldn't have to necessarily develop brand-new provisioning processes to put the cards out there. The next slide just talks about some of

CLECs to have a business-as-usual approach to

would allow the telephone company and also for the

the capabilities that the CLECs will have under the third proposal. The first one is the fact that the

ten minutes. Thank you.

(A recess was taken.)

4 point in time is now that I have discussed the 5 infrastructure very quickly, I do know that 6 everybody probably has quite a few questions related 7 to that, all those topics that we just talked about, the merger condition issues and also the 8

MR. BOYER: What I want to do at this

9 infrastructure deployment. I would like to just --10 I've had several questions during the break, just

11 reiterate the fact that as soon as I'm done

12 presenting the presentation, we're going to open 13 this up to a question and answer session and we will

14 address any questions you have at this time. I

15 would just like to make sure that all of the 16

questions are addressed for everybody in the 17 audience because we'll probably have several 18

questions from -- quite a few of the same questions from different individuals.

20 So, at this point I'm going to talk about 21 the actually unbundling plan. And for those of you

22 on the call I'm on Slide No. 20. And this is just 23 our plan for how we're going to unbundle -- the

24 actual product itself. That is what we're going to

be offering to the CLEC community as access to the

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infrastructure. And I would like to point out that the first assumption I'm going to make here is that the product outline in this presentation makes the assumption that the TELCO's going to own the ADLU card. So, based upon that assumption, this is the product that we are developing.

The first thing is, is that we're going to offer a product from two different scenarios, first one being that we will offer a set of UNEs to a line-shared application from the RT to the end user. The second one will be a data only nonline-shared facility. What I'm getting at there is, is for the copper portion of the infrastructure, the actual physical copper loop from the remote terminal to the customer location, we will allow either line sharing over the copper facility to share the voice or we will allow a data-only application, a direct dedicated data loop for DSL purposes.

In regards to the DSL products that we're going to support, there are currently defined in the DSL appendices, we will support PSD Mask No. 1 through 7 wherein it's technically feasible over the actual data-only loop. We will support ADSL and the

line-shared application at this point in time. And

1 board at that time.

> 2 In this diagram starting from the -- from 3 your right where it's a box labeled end user, again 4 we have the actual copper loop that goes from the 5 end user to the SAC or the SAI. That loop is 6 cross-connected there to a physical copper feeder 7 facility that is integrated to the Litespan 2000 8 equipment in the remote terminal. The large dot Q that you see that's labeled DLC port termination. 10 that is physically a termination or a port on one of 11 the cards, one of the ADLU cards in the Litespan. 12 The actual signal, the actual voice and data signal 13 over that copper facility terminates in that ADLU 14 port which then splits the voice and data signals. 15 And once again, I'm talking about the data signal is 16 routed over the OC-3c dedicated for data back into 17 the central office, and the voice signal is also 18 transmitted over a dedicated facility for voice into 19 the central office. 20

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Once we reach the central office which is -- if you look at the box that's labeled FDF, the fiber distribution frame, the data signal is going to be integrated into this OCD device which we talked about previously.

In the OCD the actual signal will be

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as we know, that is contingent to change in the

MS. SMITH: I'm sorry. Could you restate that again?

MR. BOYER: For line sharing we will support PSD Mask No. 5 ADSL. For the dedicated data loop, you will have the ability to offer any of the currently-offered services that are outlined in the DSL appendix today assuming that that service is feasible with the actual card that's deployed in the digital loop carrier. At this point in time the ADLU cards for the Litespan, they have an ADSL card that's been developed. The vendor's working on additional cards for other technologies. We will support any PSD mask as the card becomes available, as the physical -- as the vendor provides that service.

What I'm going to put up here is Slide 21. This is a diagram that shows the unbundled elements all interrelated to one another. It's a fairly technical diagram, and I'm going to talk through it. And again, if you have any questions after I briefly discuss this, I would reserve those until the question and answer session. I will put the pictures back up on the

cross-connected to a CLEC port. Again, that's on 2 the outbound side which is labeled the OCD port 3 termination. So, at this point we basically have three different unbundled elements in the way we're 4

5 developing this product. You have the actual what 6 we are calling UNE No. 1 which if you look at your

7 far right it's labeled DLE-ADSL UNE Sub-Loop. That 8 is just the physical copper facility from the RT to

9 the end user. That's the first UNE. 10

The second UNE that we're developing, we're referring to it as a DLE-ADSL UNE Feeder Loop. That is what we're calling a feeder facility that will go from the FDF or from the OCD basically all the way out to the point where you pick up the sub-loop. And again, you pick up the sub-loop physically in the SAC. So, the feeder will consist of the actual use of the 0C-3 dedicated facility for data, it will consist of a port in the Litespan

19 equipment or whatever DLC equipment is deployed in 20 the field, and it will consist of the actual feeder

21 piece that goes out to the SAI. So, that's the

22 second unbundled element, what we're calling the 23

DLE-ADSL Feeder Loop.

24 The third element that we're developing is 25 the OCD port. Again, that's just the physical port

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on the OCD in the central office. And again, that port can be extended to either a DSX location or to collocation for you to pick up the actual signal and route it to your -- to an ATM network or cloud.

And again, I'll reserve questions on this diagram or any other diagrams until after this presentation.

This slide just gives a numerical listing of what we're going to offer. In the line-sharing environment, we're referring to the actual copper portion of the loop as the HFPSL. I know that a lot of you are working on the line-sharing offering which is referred to as the HFPL or the high frequently portion of the loop. In this situation we're just substituting an S to represent the high frequency portion of the sub-loop. We will offer that.

We will offer in addition to that the feeder, the DLE feeder back to the CO, and then we will have the port termination at the OC-3 or DS3 level. There'll be three cross-connects associated with this depending upon the configuration that's deployed. You will have the DLE-ADSL cross-connect which is just physically the cross-connect that's

going to be made in the SAI. That's the copper

talking about the different scenarios but, again,
I'll reserve any questions until after this
meeting.

Now I'm going to talk a little bit about the service order flow and the business requirements for these products. What we've done is we've tried to separate these products into two different phases or two different types of offerings. The first thing that we are introducing is what we're calling infrastructure elements. Those elements would consist of the port, the unbundled transport or whatever transport device you purchase to get to that port and the associated cross-connects. The reason we're calling it infrastructure is that for each one of those ports on the OCD you could conceivably have hundreds to thousands of end user DSL loops run through that one port.

So, when you go into a central office to provide a DSL application under this infrastructure, you would purchase a port based upon the expected demand that you're going to have out of that particular office. So, what we would do is, if you wanted to -- if you bought a DS3 port, we would allocate 1,000 is the maximum number of end user loops we can put through a DS3 port on the OCD. So,

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cross-connect. You will have depending upon the configuration that's deployed either the OCD cross-connect to collocation or the OCD cross-connect to the DSX location.

And those would all be available under line sharing. In the data-only environment it's going to be basically the exact same offerings except for you're going to substitute obviously a data-only DSL sub-loop in place of a line share loop. That would be the only difference.

On the next slide I tried to illustrate some of the different scenarios that you might see. This is the diagram that has been discussed quite a bit. Really what this is intended to show is the fact that depending upon the configuration that's out there the CLEC would be able to deploy its own equipment, possibly even deploy its own remote terminal or adjacent remote terminal location and integrate it into our SAI boxes out to the end user.

So, this is just intended to kind of illustrate some of the different scenarios that we've seen that we've considered in developing this product. I'm not going to go through this diagram in detail because it gets pretty technical in

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we're calling it infrastructure because it's not a one-to-one ratio between the port itself and the end user. Again, with the DS3 port you could put up to a thousand end users through that one port on the OCD. If you buy an 0C-3 port, the technical capability's up to 6000 end users through that one port, so there's quite a bit of capacity through those ports. So, this really is an infrastructure element.

In addition to that, the transport itself is going to have to obviously extend that port to wherever your ATM cloud is located at, so there's -- those elements really need to be built out prior to actually providing service to end users. So, we've looked at that from the perspective as being infrastructure which is why it's called -- Step I would be called an infrastructure build. Now, those physical elements are going to be necessary as I indicated to be provisioned prior to -- prior to a CLEC placing orders for end user loops.

In regard to an order flow for these
elements, we're going to put them on one service
order, an ASR, access service request. On that ASR
you will be able to order an OCD port and whatever
cross-connect that is necessary to extend that

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port. That will either be a cross-connect to the DSX location or a physical cross-connect to collocation, and that will be put together on one 4 access service request. From your collocation cage 5 if you want to extend or if you want to transport 6 the signal to an adjacent location, you can purchase the existing unbundled dedicated transport product, 8 you could purchase an access product, whatever type of facility you want to purchase to transport that 10 facility from the collocates to your ATM cloud. The 11 same would apply for the DSX location.

In addition to the actual ASR that will have to be submitted, CLECs will be required to submit what we're referring to as a customer information form. That form is information that we're going to need on a port level to actually build translations into our equipment in the central office. And I don't have any specifics on the form itself. It's very brief, but I don't have a copy --I do not have a copy of the form at this time. It's still under development.

On the next slide I talk a little bit about the end user specific order. This is based upon the assumption that the CLEC has already built out its infrastructure elements that I just

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and the way this is going to happen is, is we're 2 developing a new system that we're referring to as SOLID. And this system is going to -- we're going 3 4 to develop an interface for the CLECs to actually go 5 into SOLID and build a profile, a profile outlining 6 the various services that they want to offer that 7 are compatible with Litespan. So, what will happen 8 is, is that on the LSR we are going to put a code set on the LSR and when the LSR is initiated by the 10 CLEC, our proposal is for that to flow through. And 11 our system, the SOLID system that we're developing. will recognize that number. It will be a numeric 12 13 number and it will build that particular profile. 14 So, we will allow CLECs to build multiple profiles 15 over this infrastructure.

So, if you wanted to offer for instance an ADSL service, you could build a profile that matched ADSL. If you wanted to build a service that supported SDSL as it becomes technically available within the Litespan, you could build a profile that supports SDSL. It's a pretty flexible tool that we're trying to develop and, again, this system is not available today. It's something that we're working very quickly trying to put together. And as it becomes available and as interest piques in this

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outlined. Once the infrastructure's in place, we work off the assumption that end user orders will be placed. Again, the end user order consists of two elements. It's going to consist of the DLE feeder piece and the sub-loop piece. The end user order is going to be ordered via a local service request on an LSR. So, there will be one LSR for an end user's sub-loop and feeder, and that should be on a one-to-one ratio per customer.

In addition to the LSR, this gets a little bit complex, but the way this is going to work is, is that you have to provision quite a few parameters in the Litespan equipment if we're using Litespan 2000. There's quite a few different elements that need to be translated and provisioned inside that device. So, what's going to happen is, is that you need to put -- you need to update the Litespan with such information as upstream speed that you want to offer, downstream speed, aggregate power. There's quite a few things that need to be built into the Litespan.

So what -- the direction that we're going in is that we are going to allow CLECs to actually build a profile of services that they want to offer that are technically compatible with the Litespan,

Page 41 product, we'll get into -- I'll be willing to get into more detail with folks as they want to come on line with us.

In regards to loop qualification, loop qualification is actually going to be used at the triggering event for this service. The way we envision this happening is that as you decide that you want to offer a DSL service to an end user, you will do a preorder loop qual. When the preorder loop qual is done, it will return back to the initiator the indication that the loop is too long for you to provide DSL service. But in that loop qual process, you will be alerted to the fact that there is an RT available out in the field that you can use to provide DSL.

So, that is really what we consider to be the triggering event to ordering end user loop is the loop qualification.

The next slide, Slide No. 27, it's very hard to see on the screen, but it should be on paper, just outlines what I just talked about in terms of a process. This is a very high level process that we're trying to put together for the ordering of this service.

The only thing I'd really like to point to

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your attention on this is the actual -- in the middle of the page, there's a list that talks about the SOLID system and the profiles that are being put together. The technical limitation is that there's really an infinite number of profiles that could be built depending upon the actual values that you want to program within the Litespan.

But the next section underneath that lists the actual fields that need to be programmed in the Litespan and what it talks about is the downstream minimum rate, upstream maximum rate. There's quite a few different elements that need to be programmed to build a profile. And there's really about -- there's so many different integer values for each one of those inputs. Like, for instance, when I speak about downstream maximum rate, it basically could go from 640 kilobits to 8,192 kilobits in increments of 32.

So, in order for us to develop a product that is adaptable and flexible enough for all the different individuals that want to use this service, the only thing we could do is let people actually go in and build their own service profiles because you could think of the number of values that you could possibly have between 640 and 8,000 in increments of

contract language that was provided to the FCC in conjunction with a request for interpretation of merger conditions. I would like to comment that anything that's in that contract language was draft as of that time which was about three weeks ago.

The product itself has fundamentally changed since then, so if there's any questions related to that

8 contract language, I would like to address them this
9 afternoon if you do have any questions on that
10 issue.
11 In regards to network disclosures, there

In regards to network disclosures, there are some network disclosures related to PRONTO that are available at the web site that's indicated here. And that is actually -- James, is that a list of the available -- where it's being deployed?

MR. KEOWN: Some of the RTs. The first batch of RTs, RTs are being deployed.

MR. BOYER: There's a list of the

actual remote terminals where we're actually
deploying PRONTO, preliminary list available at that
web site. So, that pretty much wraps up what I was
going to present. Rod wants to make a few comments
real quick, and then we'll probably open this up for
a Q and A session.

MR. CRUZ: I think at this time I

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32. It's virtually impossible for us to sit there and predict the different combinations of all these values that people would want to offer in the long term. So, the idea behind this system was to make it a flexible product offering for the long term and not necessarily just for the short -- short term.

Slide 28 talks about the rate structure. We do not have rates as of this time, but this is the way we are approaching the actual elements that will be developed. This matches the Southwestern Bell rate structure; it does not match the OANAD rate structure. I'm not going to get into detail on this, but this is the rate structure that we're proposing right now. I will take questions on that later if there's any questions.

And the last slide talks about the business requirements and product availability date. We are working on business requirements this week. We expect those to be available by the end of this week or the beginning of next. The product availability date is expected to be available in late April or early May. That's when we expect all the actual product development work to be completed.

Contract language, there was some draft

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would like to just go ahead and open up the floor for questions, and we could - if you just would be kind enough to once again state your name and the company you're with and then if you want to reference a certain architecture diagram that Chris has presented, we could also do that. In addition, I'd like to introduce a couple of other SBC individuals that are here to assist us in answering the questions.

Chris Boyer, as I stated earlier in the introduction, is the product manager for the broadband UNE, so he can really address and speak to specific product policies and positions, et-cetera, and he could really talk some detail. But in addition to that we have James Keown in the front row and Marsha Fischer also with SBC from the network organization that can address some specific network issues. And then also from the network regulatory organization is Allan Samson that can also help address any of your questions or concerns.

I guess really I want to make just one brief comment. I think the quandary that we have in front of us with the FCC is, is really you've got this UNE that the TELCO owns and in the middle of it

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there's things that we can't own. So, it just makes 2 it very cumbersome and problematic when you look at 3 a provisioning flow, when you look at systems work 4 and how you actually flow orders through to order 5 this product. You know, if it was all owned by the 6 TELCO, it just makes it easier to do some things and 7 give us some flexibility and latitude. I think it 8 benefits both parties. And obviously I think when 9 you look at a high level, that's really the issue is 10 you've got this UNE on the end, from the middle 11 there's a couple of things that don't fit. 12

So, you know, Chris obviously can get into a lot more level detailed discussion if that's something that's on your mind you want to flush out and expand on. That's really the essence of the issue, and I think that's where we're at as far as we have done countless hours of meetings and thoughts and think tanks on how to break that code to make it -- make this thing flow, and we really just haven't reached a conclusion.

21 So, what I'd propose is I'd like to open 22 the floor for questions, as I stated earlier, and 23 then I think as we move forward over the next couple 24 of weeks, I'm just really looking forward to getting into negotiations with you guys and either hearing

Page 48 deploying in conjunction with this infrastructure. 2 Those two types of technology are the Litespan 2000 3 which is an Alcatel product or the UMC 1000 which is

4 a product that's being developed I believe by AFC, 5 AFC.

MR. KEOWN: Yes.

MR. BOYER: We have not -- the AFC product, the UMC 1000, is really being deployed in some of the actual more -- I believe it's in the more rural areas: isn't that correct?

MR. KEOWN: Smaller locations.

MR. BOYER: Smaller locations. We have not completely considered that product yet, but the assumption of this presentation is based mostly upon the Litespan device.

MR. CRUZ: Could you flush out the difference between the Litespan 2000 and 2012 just for the folks that may not -- I just think -- I think it's a -- go ahead, James, if you want to take

MR. BOYER: Let James take that. The 2012 is different.

23 MR. KEOWN: The basic difference 24 between the Litespan 2000 and 2012 is the Litespan 25 2000 has one 0C-3 that can transmit the voice signal

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1 your opinions or suggestions on how we do that 2 together because we haven't been able to find a 3 solution to that -- to that -- resolve that issue. 4 So, at this time I guess I would just like to go 5 ahead and open up the floor. If you could just maybe state your name again and the company, we'll 6 7 start fielding your questions. MS. THOMAS: Actually I have many 8 9

more now. I am Sharon Thomas with Advanced Telecom Group.

MR. CRUZ: I'm sorry. Could you speak up a little?

MS. THOMAS: Sharon Thomas with Advanced Telecom Group. The first question I have that you asked me to reask so everyone could hear, you had mentioned there were two types of technology or equipment that would go in the remote terminals, and the first one I think you said was the ADLU, the Litespan 2000, 2012 card, and I didn't catch the other one and maybe you can explain what that is.

MR. CRUZ: Chris. MR. BOYER: I'll take that. For the 23 folks on the conference call, the question was asked in regards to I had mentioned earlier that there 24 25 were two types of technologies that we were

back and one 0C-3c pipe back for the data. The 1 Litespan 2012, the major difference is the sound of 2

the pipe. It's an OC-12 pipe that can haul voice 3 4 and data back. That's basically the difference.

5 And the benefits of the bandwidth is to drop all --

6 if you had DS3s you want to drop off somewhere, we 7 can do that.

8 MR. CRUZ: And, James, is it true 9 that the 2012 card is a quad card and the 2000 is 10 only a dual card, or is that not correct?

MR. KEOWN: No.

MR. CRUZ: Okay. Explain that.

13 MR. KEOWN: The basic ADLU card whether it's a combo card or quad card would fit in 14 15 a 2000 or 2012.

MR. CRUZ: Thank you.

17 MR. KEOWN: It's both the same

18 product.

19 MR. CRUZ: Do you have a follow-up? 20 MS. THOMAS: Yes, I do. I guess looking at one of your slides where you indicated

21 22 that -- let me find it for you. The infrastructure

23 that you've described, you basically indicated that it would either be used with line sharing or data 24

only. Now, how does a CLEC that is an integrated 25

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service provider get a loop to provide both voice and data under this architecture that's going through the remote terminal?

MR. CRUZ: Let's look at the slide.

MR. BOYER: 20.

MR. CRUZ: I think it's Slide 20. Give us one second. Thinking through this. You know, I think it's a good suggestion. I don't think it's something we've contemplated, so I think we'll have to go back to the drawing board and address that.

MS. THOMAS: That's pretty scary.

There's a lot of us out here. I mean, I think
you -- I sense from your letters to the FCC that you
had meetings with Covad and North Point and Rhythms
and you didn't have meetings with anyone that's an
integrated service provider and that's pretty scary
for us.

MR. CRUZ: The fact that we had the meetings or the fact we haven't contemplated the scenario?

MS. THOMAS: No, this does not contemplate I don't think how we would be able to provide service from any of these remote terminals.

MR. SAMSON: Can I frame that? Or

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less than 18 kilofeet, okay. On those we'd leave those there for the POTS. The DSL service would still be providing this kind of an architecture, okay. So, those copper loops that are in the 17 and a half and below range, you still use a CO-based DSLAM for that, okay. So, I think does that answer that one for you?

MS. THOMAS: It helps that. MS. FISCHER: Okay.

MS. THOMAS: I mean, obviously we're also concerned about being able to compete for the kind of loops that SBC ASI is trying to compete for.

MS. FISCHER: Sharon, let me take a

crack at your first question, see if I'm clear on it. Can we go to Slide 23, please? Sharon, by integrated provider, talking about you provide the voice and the POTS.

18 MR. SAMSON: Or data.
19 MR. CRUZ: Data and voice.

MS. FISCHER: I'm sorry, so sorry.

21 POTS and the data.

MS. THOMAS: POTS and the data.
MS. FISCHER: There's a couple of
ways. This drawing, see, No. 1, take Path 1 from

25 the end user back, it's intended to show that you

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let me ask the question that for loops let's say

2 less than 18,000 feet or whatever the magic number 3 is, you could provide voice and data over

3 is, you could provide voice and data over 4 traditional copper pair, so is your question to the

5 extent that there's a loop that's maybe 25,000 feet long and you don't want to put a DSLAM at the RT,

7 how could an integrated provider provide both voice 8 and data over some sort of arrangement like this, 9 get the voice stream and the data stream? Is that a

9 get the voice stream and the data stream? Is that a good framing of it a little bit?

MS. THOMAS: I think that's correct.

And I don't know, one of my other questions is, you know, sort of where are you putting these remotes and is it only for loops beyond 18,000 feet? I've heard that perhaps you're putting them a little closer to the wire centers which would make, you know, copper loops even less accessible. In other words, we'd have to go through remotes even for not that long of loops. But I think --

MR. CRUZ: I think maybe Marsha may have a comment.

MS. FISCHER: The second one is true. I mean, the whole goal is to push out DLC, but we do have areas that are served by like an existing digital loop carrier system that may be

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can still get the same 8 DB voice UNE, okay, with this technology and it works the same way. The POTS

3 can be groomed, sent to your voice switch wherever

4 that may be. Now, if for whatever reason in your 5 business plans it makes sense to place your own

business plans it makes sense to place your own
 equipment out there, and you could do this in a

7 public right-of-way environment or you could acquire

8 whatever land you may need, you could place that9 equipment, you'd have to build access back to that

10 SAI, okay. And that's where you would get the

line-shared loop where you could put your POTS and your data.

MS. THOMAS: Yeah, I mean, we generally aren't going to be wanting to place -- I mean, we may in some limited instances, but generally we'd still like to ride the ILEC plan out to, you know, the whole length of the CO to the --

MS. FISCHER: And that's -- that, again, our thought was you still had the 8 DB UNE coming back in and then you could use the broadband UNE product to get the voice and the data.

UNE product to get the voice and the data.

MS. THOMAS: And I guess I'm just
confused because it seems to me the way you have
this, in other words, we could get a loop that goes

following Path 1 all the way back to where it looks

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like it terminates in this SONET common control area. You're saying we would get that loop and at that point we would be able to split the voice and the data or --

MS. FISCHER: No, the data's already left at that point. The data is riding back in the OC-3c signal.

MS. THOMAS: So, we have to somehow use both of those. I'm not an engineer, I admit, and so I'm a little confused.

MR. KEOWN: Well, because of the way this technologist developed the design, what you're trying to do is already being done basically in the broadband UNE pipe. So, we can sell you a UNE that carries voice and a UNE that carries data, so you'll end up with two UNEs is essentially what you have. But the technology won't allow us to haul this back and combine it back for you into a pipe that goes into a copper facility back to your whatever device vou service.

MS. THOMAS: Can I make sure that I have that straight now? So, if you're an integrated provider they can purchase from SBC a UNE to provide the voice and a UNE to provide the data? That's vour statement.

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1 requirement that's been placed upon us, a line-shared UNE loop where SBC is the traditional 2 3 TELCO voice provider and the data CLEC is the data 4 provider; yes, we can. Those are the three 5 requirements that we perceive that are on us and with this proposal, that's how we would meet those 6 7

three requirements. 8 I think what you're raising, and I don't 9 want to characterize this any way pro or con, but 10 let me just kind of put it in my words. What you're 11 raising is beyond our obligation to provide an 12 analog line, a digital line and a line-shared line 13 where we're the voice provider. It sounds to me 14 like you're saying could you provide a line-shared 15 line where you're not the voice provider but that I 16 am both the voice and the data provider. And while 17 you -- which isn't really a line-shared line in the 18 respect that two different companies are using it 19 but it's a line that you want to use for both those 20 applications. And while it's a good question, what 21 hasn't been flushed out is that a requirement, can 22 we do it, should we do it or whatever, and I think 23 what we've learned today from this meeting already 24 is that we probably need to think through that. 25 But we can give you a DSL loop with this

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MR. KEOWN: Well, that is not a product that's being offered at this time. That product's not being offered at this time.

UNIDENTIFIED SPEAKER: I'm sorry. We couldn't hear that.

UNIDENTIFIED SPEAKER: Can y'all repeat the question, please?

MR. KEOWN: The question was, can she buy a POTS UNE and a data UNE over this infrastructure; is that correct? And I'm saying you can buy an 8 DB UNE LUNE -- UNE LUNE -- we are in a 12 little trouble here. You can buy an 8 DB UNE loop over this infrastructure and everyone is happy. Works the same way as any other DLC that we have out

in the field today, buy the UNE loop. MR. CRUZ: You have a comment. MR. SAMSON: Well, I think, James,

18 just to add what you're saying, you have to -- and I 19 think your comment's good and we need to take a look

20 at that, so -- and we've kind of said we haven't

21 flushed that out as well, but if you think about

22 where we've come from, you know, can we provide an

23 8 DB analog loop, yes, we can; can we provide a 24 stand-alone DSL UNE loop, yes, we can; can we

provide a line-shared, which is the latest

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architecture which we're required to do, we can give you an analog loop with this architecture which we're required to do and we can do line sharing where we're the voice provider and you're the data provider. And so for sure those are the things that are safe that can be provided.

MS. TAFF-RICE: May I just follow up on that then? I'm Anita Taff-Rice with Rhythms. What you're saying is that you just don't have that offering? Are you saying there's a technical reason why or it's just beyond the requirements of the merger conditions order?

MR. SAMSON: Let me think through your question there. What we're saying is what we've presented to you today, that isn't an offering here that we're presenting today. What we were trying to address with this architecture is the line-sharing requirement and the DSL loop requirement that we have, you know, and the issues surrounding collocating a DSLAM at the RT.

21 MS. TAFF-RICE: So, let me try to 22 reiterate the question then. I think I wasn't clear 23 enough.

24 MR. SAMSON: Okay. 25

MS. TAFF-RICE: This offering that we

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were just describing that Mr. Keown said is not 2 available today, that would be where a CLEC would be the integrated voice and data provider, and I know 4 you don't consider that line sharing because it's 5 the same company, but that offering is what I'm 6 talking about. 7

MR. SAMSON: Okav.

MS. TAFF-RICE: That is beyond the scope of what you perceive as being your requirements under the merger conditions order? Did I understand that right?

MR. SAMSON: No, that's not what I said. Again, I was trying to say I don't want to characterize it. There may be an opening question, is there a requirement to provide something like that, and I'm not sure that I know the answer to that question. But what I am addressing are the things --

MS. TAFF-RICE: Okav. Assuming the 20 answer is yes, is there a technical reason why you can't provide that today?

MR. SAMSON: James, I don't know -- I wouldn't feel like I'm the most knowledgeable guy to address whether there's a technical reason or not.

MR. KEOWN: Do it for yourselves. Do

1 you as well.

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MR. SAMSON: A guy over here's been very patient.

MR. CRUZ: One moment. Sharon, had -- I'm not sure whether that wraps up all your questions.

MS. THOMAS: I had a few more but I won't hog the floor here, so --

MR. CRUZ: Sir?

MR. RUDOLPH: Lee Rudolph, 10 11 Fort Bend Telephone. For us as CLECs to kind of 12 support this kind of scenario, those of us that are 13 integrated providers must do both voice and data. 14 And so we would be looking for that third 15 alternative as one of the three choices versus one 16 where you're the voice side and we're the data side 17 only. So, I really would encourage you to take a 18 strong look at that.

19 MR. CRUZ: Thanks, Lee, for that feedback. A hand's going up. I know this 20 gentleman's been wanting to speak for a while. I'll 21 22 get to you in a second.

MR. MURTHY: Murthy from PNS Communications. One of the things I just want to address on the questions that have been going about

it -- from a technical point of view, if you can do it for yourself from the voice side and somebody else from the data side, then technically you can do it for, you know, a CLEC to do the voice as well.

MR. SAMSON: Yeah, and maybe we need to have some additional thinking around the technical implications. We weren't really coming with that in mind, so we don't want to make an off-the-hand comment in that regard.

MR. CRUZ: And I think the point is we really haven't thought through it, which is Allan's initial reaction to this, and I would concur that that was not something we had contemplated in including in this current product offering we've described today, but it does give us some good feedback to go through and think through what our position on that will be. So, I don't want to come out and say we will not do it or we will do it or commit, make comments whether it's technically feasible or not or what our position is yet because we just haven't had time to flush it out, so at least --

22 MS. THOMAS: Well, we'll be happy to 24 work with you.

MR. CRUZ: I'll be happy to work with

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1 is in a multi-dwelling unit, campus involvement or multi-tenant unit as it's sometimes called, that 2

3 kind of requirement can be more, you know,

4 meaningful. There is an application for that. The

5 CLECs would come to you. CLECs sometimes there are

6 CLECs providing services to a metropolitan area or

7 they may be only providing to a building. They may

8 come to you for such a requirement. Anyway, my

9 question was, I have technical questions, I have

10 business questions and I'm going to ask only one at a time so other people get a chance to ask. 11

MR. CRUZ: Great.

MR. MURTHY: What is the deployment 14 road map which covers locations, cities, states and how are you going to decide where and when in what logistics you are going to deploy all this over three years and are you going to do any survey from

18 the CLECs depending on where the needs are, who is 19 interested, how many CLECs like here who are present

20 would be interested in giving, you know, their 21

feedback on priorities, especially this road map, in 22 terms of time"

23 MR. CRUZ: Just to paraphrase your 24 question, make sure I captured the essence, you're interested in knowing the PRONTO build-out

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schedules, the priorities, what input or role does a CLEC have to influence that prioritization process?

MR. MURTHY: Exactly, exactly.

MR. CRUZ: And I'm going to just punt that right to James.

MR. MURTHY: You don't have to answer the questions now.

MR. CRUZ: That's kind of out of my realm of expertise so, James, is there something you could share with the folks here or Marsha maybe?

MS. FISCHER: I mean, the targeted wire centers are out on the web at that web address, okay. And there are time frames for initial set, okay. And I believe there's months for the closer-in periods. We're talking about going into quarters, okay, so you'll see wire centers. And then as we unfold, and we're still working through our planning processes, you'll begin to see RT locations.

MR. MURTHY: And what are the positions based on at this time for the road map? Was there a feedback from the CLECs or where is the concentration of users or something like that?

24 MS. FISCHER: There hasn't been 25 anything like that to date.

your CO-based DSLAMs up to the distance and the

2 speed requirement that you need, all right? But

3 there are subdivisions, a variety of campuses, you 4

mentioned end users, those kind of things, they're 5 served by existing pair gain devices, okay, and we

6 are not going to go back and upgrade some of those. 7

We're going to place this in the same geographic 8 area and turn those houses green or whatever the 9 right choice of words are.

MR. SIEGEL: And I guess my question was, where there's existing pair gain devices I think I understood that from your question. I guess my question was, will new pair gain devices be put into the field at less than 18,000 kilofeet?

15 MS. FISCHER: Yes, yes, because 16 you have if -- think about your CO-based DSLAM, if 17 you want to offer one and a half meg and you're 18 really pretty good up to 12 kilofeet, right, 12 to 19 17 and a half, you know, it's kind of marginal,

20 depends on the loops and the interferers, so yes. 21 MR. HUGMAN: Chris Hugman with

22 Connect South. To follow up to his question, so 23 does that mean that loops that I have that are

24 available to me today may not be available to me 25

tomorrow because of this?

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MR. SAMSON: Marsha, would it be safe to say or not, because I don't know, I would ask that it's somewhat based on population and obviously we're targeting big cities before rural areas, and so there's some sort of intelligence based on customer density that went into the schedule that's been put together.

MR. KEOWN: Lots of demographic information.

MR. SAMSON: Demographic information.

MR. CRUZ: Howard? MR. SIEGEL: Howard Siegel, IP

Communications. Marsha, if you could clarify the answer on new DLC. My understanding from your answer was, but I'm not clear, is that where there's existing DLC less than 18 kilofeet this is architecturally put in but there won't be new DLC

18 being put in at under 18,000 kilofeet, that we're 19 talking about longer distances for new DLC

20 deployment with this architecture? 21

MS. FISCHER: Okay. The question is kind of back to Sharon's original one. Are we going to place this architecture less than 18 kilofeet? Is that your assessment? The answer's yes, we will, okay. If there are existing copper loops today, use

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MS. FISCHER: No. 2 MR. KEOWN: No. 3 MS. FISCHER: No. 4

MS. TAFF-RICE: I'm sorry. Could you explain that answer? How can that be? If there's pair gain that's going to be there tomorrow that isn't there today, how does that not eliminate a loop that would be DSL capable?

MS. FISCHER: This pair gain is DLS capable.

MS. TAFF-RICE: For ADSL only. MS. FISCHER: Well, and for other

DSL.

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MS. TAFF-RICE: But for other types of DSL are you saying that putting new pair gain in is not going to reduce the number of loops that could be provided for any kind of DSL?

MR. SIEGEL: And specifically for your DSLAM in your -- in the central office.

MR. SAMSON: Is the question are we 20 21 going to put pair gain -- this in and then take the 22 copper loops out or something along those lines? Is 23 that what you're requesting?

> MS. FISCHER: Is that it? UNIDENTIFIED SPEAKER: I'm struggling

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MR. SAMSON: I don't believe, James, it's not going to wreck any plant that's existing

with --

MR. KEOWN: Exactly. Whatever exists out there today, this network is to go in to shorten loops, make loops 12 kilofeet. But whatever exists today, whatever copper's out there today that you're riding a DSL service over today will be there tomorrow, will be there till it deteriorates and rot away from us.

MR. CRUZ: Let's not say that.

MR. KEOWN: Maybe not, but whatever copper loop is out there today, you'll still be able to buy that copper loop today if you want to buy it and we have it available. Those UNEs will be made available as far as I know. We aren't going to wreck it out just because we're putting in this architecture.

20 MR. CRUZ: Does that answer your 21 question or were you --

MS. LOPEZ: Well, I want to continue on his question. This is Ann Lopez from Rhythms. You're deploying at 12 kilofeet. I might be

25 deploying at 15, 16, 17 kilofeet and you put this

Page 68 the new PROJECT PRONTO, but the number of copper F1 1

2 pairs did not go down. They're still there. 3

Now, as we provision new POTS service, in fact, I might argue it frees up more copper pairs because folks that aren't DSL capable aren't interested in buying DSL, they just want a POTS line, they will start being provisioned over the new

8 digital loop carrier and that will then take the 9 pressure off the voice-only use of the F1 copper

So, you could argue it. I mean, every case will probably be a slightly different mix and who know for sure, but the F1 pairs, we're not planning on short of normal cable maintenance, if it's an old cable that's paper or pulp or whatever and we have to replace it we do, but there's no proactive plan to install this and then take out all these existing F1 pairs. I think, James, you would agree with that.

20 MR. KEOWN: I agree.

21 MS. TAFF-RICE: Has SBC done a study 22 as to whether this would reduce the number of F2s 23 that are available?

MR. SAMSON: Well, no, I don't think you need to. The question was, is there some study

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in, you've knocked me out.

MR. KEOWN: No.

MR. SAMSON: How so, Ann?

MS. FISCHER: Kind of help me with --

MR. KEOWN: I'm not saying that.

6 MS. FISCHER: -- the thought process. 7

MR. KEOWN: This is not taking away copper loops. So, if you're providing service out to 16 kilofeet over existing copper loops today and we've deployed this network, that 16 kilofoot copper loop will still be there.

MR. SIEGEL: But as population grows in that area, the percentage of loops that are accessible to us in that area is going to diminish because the new growth is going to be all served by the DLC as opposed to new copper.

MR. KEOWN: Maybe.

MR. SAMSON: Well, yes and no. And correct me if I'm wrong. Take a feeder. You have an RT somewhere and there is a copper-fed RT, we place a digital loop carrier, you might have an argument that there's some competition for the F2 pairs now because the F2 that comes into that RT,

24 some are going to be cross-connected to the existing copper F1s, some are now going to be connected to

1 that's been done to talk about if F2 pairs would be reduced. The number of F2s, let's say an existing 2

3 neighborhood with no growth, okay, there's X number

4 of F2s there today. When you put in the pair gain

5 device, there's still the same number of F2. Some

of those folks are going to be POTS only customers 6

7 that may go through the new pair gain, may go on the

8 old copper. Some of those may be your DSL customers

9 that are on existing copper, so there's really

nothing that's going to happen with the F2.

11 Now, as additional neighborhoods come on 12 and we build additional F2 distribution, they will 13 be mapped into that RT, and depending on the 14 application, they may ride the digital loop carrier,

15 they may ride the existing F1. But I don't know

16 that there's a need to do any study. I'm not sure 17

what we'd be studying, per se, because what's there 18 is there and more copper distribution may be placed

19 but -- so, I guess I don't think, James, you or I

20 are understanding how this would reduce in any way 21 the amount of copper available to CLECs. Yes, sir.

MR. RALL: To the extent that you

23 deploy this architecture --

MR. CRUZ: I'm sorry. Could you give

25 us your name and company, please.

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Page 70 Page 72 1 MR. RALL: Gary Rall with AT&T. 1 your customers about it rather than just making a 2 MR. CRUZ: Thanks, Garv. 2 unilateral --3 MR. RALL: To the extent you deploy 3 MR. CRUZ: There's a question way in 4 this architecture and then you turn a neighborhood 4 the back. I'm sorry. I'll get to you guys in just 5 5 green as you were saying so that you could pick up one second. Yes, ma'am. 6 higher speed DSL service and you run it back to the 6 MS. BLAIN: Got a long list. What's 7 central office and you're running that new 7 the density --8 architecture and then the customer wants to switch 8 MR. CRUZ: I'm sorry, your name and 9 their service provider away from SBC to AT&T, for 9 your company? 10 10 instance, since you're saying that AT&T can't MS. BLAIN: Lucy Blain, Caprock provide both the voice and data over this new 11 11 Communications. architecture, you would have to swing that customer 12 12 MR. CRUZ: Hi, Lucy. 13 13 back to copper and copper won't support the service MS. BLAIN: What's the density of the 14 14 because before you put in this architecture it was AFC UMC box, your Litespan 2000 and Litespan 1000 as not a green architecture. So, you see, that's the 15 far as POTS subscriber accounts that are going to be 15 16 problem we have of not being able to utilize this on 16 served out of each technical equipment? 17 17 MR. KEOWN: The Litespan 2000 POTS -a going-forward basis. 18 18 MR. CRUZ: Do you want to rephrase MR. SAMSON: So, I think what your 19 comment leads us to is what we said earlier is that 19 the question for the folks on the call? 20 we need to take into consideration the request that 20 MR. KEOWN: The question is, how many 21 you had about having a product over this Litespan 21 POTS customers can you have in a Litespan 2000 and a 22 that offers to an integrator provider both the voice 22 UMC 1000 box. Marsha, help me on the UMC, but on 23 and the data stream over the Litespan rather than 23 the Litespan 2000 you get 2,016 POTS assuming it was 24 just a DSL or just a line-shared loop. 24 completely plugged in, POTS only. On the UMC it's 25 25 672, I believe, 672 POTS customers in the UMC 1000 MR. RALL: Right, and as a part of Page 71 Page 73 1 that I think what was said below there, I think you product. need to get input from the CLECs on where you deploy 2 2 UNIDENTIFIED SPEAKER: Can you speak 3 to DSL? 3 this. I imagine your whole architecture's based on 4 ASI's deployment criteria right now and not the 4 MS. FISCHER: Okay. For -- the 5 5 configurations vary, okay. We have some housings CLECs. MR. SAMSON: Well, I wouldn't agree 6 that are CEVs, some that are huts and some that are 6 7

with that statement certainly, but I think we mentioned it was based on population densities as a rough gauge, you know, hit the big cities, the dense markets. I bet James would --

MR. RALL: So, it's not based upon anybody's data, any of the data CLECs input?

MR. SAMSON: James, I mean, you can speak to that, but my understanding was a population density type.

MR. KEOWN: It was a lot of demographic data including population.

MR. SAMSON: Percent of existing DLC, things like that.

MR. KEOWN: There's a variety of marketing data that was gathered, punched into computers and crunched out numbers that said these look like the right locations that have the right demographics for this type service. I don't --MR. RALL: I think you should talk to

7 cabinets and there are various size cabinets as 8 well. As James said, though, on the Litespan 2000, 9 2,016 POTS, dependent upon the cabinet or the CEV or 10 the hut that number of ADSL circuits can go up. 672

12 MS. BLAIN: I'm actually talking about POTS because I want to get a feel for how many 13 14 subscriber base that we can go after by going with, you know, when you put in these DLCs, you know, how 15 16 many voice customers you're going to throw onto these new Litespan and UMC devices. 17

MS. FISCHER: Okay.

is approximately.

MS. BLAIN: So that we can figure 19 20 out, you know, do we even want to take a chance at 21 this DLC location at all, you know, is there enough 22 opportunity out there for us.

23 MS. FISCHER: Right.

24 MS. BLAIN: So, what do you think is 25 the average line size of POTS customers served out

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of some of these locations?

2 MS. FISCHER: What we'll do in 3 existing locations, we'll use our existing 4 technologies for POTS, okay. So, new ADSL 5 subscribers that would use this UNE, the POTS would 6 go on this architecture. New POTS growth would go 7 on there. 1,344 POTS with 672 ADSL is one 8 configuration. 2,016 POTS is the element. Now, 9 we're creating -- up there on the drawing you saw an 10 SAI. Those are neighborhoods typically, okay. And 11 if you read the investor briefing, there's something 12 called a neighborhood gateway. That's in essence 13 these remote terminals, okay, and there's anywhere from maybe three to five distribution areas and 14 15 those distribution areas can have 200 to 600 living 16 units, okay. Yeah, and some of those are populated, 17 some of those have vacant land in them, that kind of 18 thing. So, I apologize. I don't know if there's a 19 pat answer to the question. It's going to vary by 20

21 MS. BLAIN: That gives us a good 22 idea. Now, when you put in these new Litespans and 23 UMCs, how much -- I guess in the cabinets or CEVs, how much OEM shelf space are you going to leave open 24

for CLECs and DLECs to be able to collocate inside

the card. And the dual card's what's available today. The quad will be available later this year. but that would give you four POTS and four ADSL on the same card.

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But the problem with that was, if each of us only had, you know, one customer per Caprock, one for Covad on a card, you had three ports in essence vacant, which is a capital issue we thought for many of the CLECs, but it was a space issue. You could consume all the slots. So, with this product we thought it just let us all collectively take

11 12 advantage of the limited amount of real estate 13 that's in the houses.

MR. MANN: Can I follow up on that question because -- Gary Mann with Golden Harbor -earlier you said that beyond 18 kilofeet the way that the CLECs could actively compete was to collocate, and the only way we can collocate is if you provide enough space. And of course the only

19 20 way we know if that's economically feasible is if we 21 know what it's going to cost us to collocate versus

22 the prices for all these things you gave us at the

23 end that you haven't developed yet. So, how can we 24

compete if you're not going to provide space to

25 collocate though?

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those cabinets and CEVs? Give me some idea. I mean, are you just going to have one 19-inch shelf. you know, worth of one shelf open or what are the plans?

MS. FISCHER: We're still working through that. There's two issues with all of these housings that we need to be mindful of. One is physical space. The other one is what we've called up here environmental capacity, power, power drain and heat, okay. We're working through some issues, and what we've talked about is increasing the size of our huts and CEVs beyond what we believe the forecasted demand would be.

MR. SAMSON: On new bills.

MS. FISCHER: On new bills for -- and again, this relates to PROJECT PRONTO, okay. And then in cabinets, those may or may not have enough space in them, okay. Again, we order different configurations. So that's -- you know, that's another reason why we've come to this product as it is today is because it really lets us take advantage, us being the entire community of interest here, take advantage of the limited amount of

24 space. And as Chris said, one of our first

25 alternatives that we looked at was the CLECs owning

MR. SAMSON: Well, I can address that 2 from a -- you know, the RT is a real tricky place.

3 As I think you would agree, that there's no 4 requirement for us to go out and build more RTs and

5 make them bigger. At least that's the way we've 6

read the requirements that to the extent we have 7 space, absolutely, we need to provide via 9948 in 8 the collocation rules terms and conditions, and I

9 think in most of our states we have. The existing

10 collo terms you could submit an application to collocate in an RT. I think the practical reality 11

12 is there's just a large number of those that there 13 just isn't going to be sufficient space. So then

14 the question becomes, if you want to collocate, you absolutely can; put an application in and if there's 15 16 space it will be there. But if there's not, then

17 there isn't.

18 Now, when a new RT site is built, you 19 know, one of things that have been looked at is we 20 need to size these for -- as we would a year ago

21 when we're building an RT for a digital loop carrier 22 for traditional POTS, you don't build those extra

23 big just to have lots of room in there. You

24 oftentimes have rights-of-way issues and you only

25 have so much of a footprint to work with. So, on

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new builds we're going to build them to size the 2 equipment that we need. There's been some

3 discussions internally do we need to somehow add an

extra 10 percent on the space that's in there to 5

provide for collocation, and we're working through

6 those. I don't know that there's a strong 7

requirement either way, but to the extent that we can, we're going to try to accommodate that.

MR. MANN: Well, yeah, just going back to Sharon's first question when we started this discussion.

MR. SAMSON: Sure.

13 MR. MANN: And ya'll said that for 14 less than 18 kilofeet the copper's still going to be there, so you have a viable alternative. For 18 15 kilofeet or greater, her response was you can 16 17 collocate. How can you collocate if you're not 18 going to have the space available?

MR. SAMSON: Well, and let me modify that a little bit. Where space is available. That's not the only option. I think sub-loops are going to be available to the extent that you want to

22 23 place your own RT next to ours or pedestal or bring 24 some fiber. I mean, the sub-loop discussion, which

this in general UNE Remand sub-loop is probably

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MR. STOTLER: Keeping with the voice 1 2 and data theme, could we look at Slide No. 8? 3 Because unless I misunderstood, I thought this is 4 showing us that indeed voice and data would be 5 available. I believe that's it. 6

MR. SAMSON: What was the question again? I'm sorry.

8 MR. STOTLER: Well, I thought this 9 slide indicates that both voice and data would be 10 available. I also understood that the CLEC would be 11 purchasing ports for voice and data over the ATM 12 network. Is that not what we're showing here?

13 MR. KEOWN: No.

14 MR. STOTLER: You have an OC-3 POTS 15 and an OC-3 data going into your OCD.

16 MR. KEOWN: That OC-3 data pipe is a 17 shared pipe for all the DSL services riding out of 18 that RT.

MR. STOTLER: But would you not map 19 20 VCs through that network and then map those VCs over 21 to the CLEC connection into the ATM CLEC switch?

22 MR. SAMSON: James, isn't the ports 23 we're talking about really on this side? This is a

24 shared port for all data CLECs including ASI and 25

everyone else. This is common. This device

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1 broader than the scope of today's meeting, but to 2 the extent that the options are available today with

3 or without PRONTO, and that is, you could collocate

where there's space, where there's not space,

5 perhaps you do an adjacent, you place your own RT and we run a jumper between ours and yours, that set 6 7 of options that would be available with or without 8

PRONTO I think is what Marsha was referring to.

Those same set of options all exist for you. 10

And so, you know, if it's greater than 18,000 feet and it wouldn't have worked for you today and you're not interested in this product that we're offering, then those options are available whether that be collocating or placing it next to us

MR. MANN: All that kind of hinges on whether or not you're going to make the voice and data available together.

MR. SAMSON: And again, for the third time, we need to go back and take a look at that. That's a good point.

MR. CRUZ: Right up front, yes, sir. MR. STOTLER: Stan Stotler with

23 24 Omniplex. 25

MR. CRUZ: Hi, Stan.

separates those packets out to the individual

carriers, and what you would be purchasing is a port or two DC-3 or OC-3 on this side of it to get it

4 back to your collocation.

MR. KEOWN: That's correct.

MR. SAMSON: And on this side this would be SBC-provided POTS coming in that SBC would then demultiplex down and run into the switch.

UNIDENTIFIED SPEAKER: So, it could 10 be shared POTS.

MR. STOTLER: So, the POTS would not 11 be sent out on the outbound port in a DS3 or OC-3 to 13 the ATM switch that the CLEC owns?

14 MR. SAMSON: It'd be a DS1, wouldn't it, into a digital switch or whatever? 15

16 MR. KEOWN: Whatever the DSO or

17 DS1. It won't come through the OCD, outbound ATM 18 switch, the voice won't. 19

MR. STOTLER: It cannot or it won't? 20 MR. KEOWN: It won't and cannot.

21 Well, it cannot under this architecture.

MR. STOTLER: Under this

23 architecture.

24 MR. SAMSON: You notice the OCD is

separate from where the POTS. The POTS is

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not a requirement to do that.

Page 82 Page 84 1 terminating in the traditional SONET here; is that 1 MR. NUTTALL: Another way to state 2 correct? the answer is line sharing through PROJECT PRONTO is 3 MR. KEOWN: Yeah. 3 only available on an SBC provided POTS service. 4 MR. SAMSON: The OCD is where the 4 MR. SAMSON: This will be the fourth 5 packets return --5 time. Based on what we shared today, we understand MR. STOTLER: Okay. So, that's 6 that you-all would like the opportunity to have 6 7 really two separate --7 CLEC-provided voice over that and we had not 8 MR. SAMSON: It's two separate 8 contemplated that previously. So, yes, today the 9 facilities, yes. 9 product that we're talking about is the 8 DB loop, 10 UNIDENTIFIED SPEAKER: And we're 10 the DSL loop and a line-shared loop where SBC is the 11 going to -- we'll take the OCD. POTS provider consistent we believe with what the 11 12 UNIDENTIFIED SPEAKER: It's actually line-sharing order has asked us to do. Any add-ons 12 13 not one network element, it's really two. 13 to that or anything? 14 MR. KEOWN: It's actually two 14 MR. KEOWN: No. 15 separate network elements, two separate common 15 MS. SMITH: I have a question. It 16 vendors that make those elements, as a matter of 16 might have been answered previously, but I couldn't 17 fact. 17 hear. There was a question posed about whether or 18 UNIDENTIFIED SPEAKER: Okay. I 18 not the POTS signal could go --19 understand that. 19 MR. CRUZ: I'm sorry to interrupt. 20 MR. CRUZ: Yes, sir. 20 Could you tell us your name and the company you're 21 MR. NUTTALL: Gary Nuttall with Sage. 21 with, please? 22 Are you saying in that picture, Allan, you just 22 MS. SMITH: I'm sorry. This is 23 pointed out the OC-3 POTS. Can that be a UNE CLEC 23 Kristin Smith with Rhythms. Can the POTS signal not 24 POTS as well? Because your voice splitter is out of 24 go to the OCD? Is there a technical reason why it 25 your RT, so if I'm doing my voice splitting out 25 can't or does it just not go there? Page 85 there, why can I not have UNE POTS and split out my 1 MS. SAMSON: Doesn't go there. data and do the DSL on my data line and doing that 2 MR. KEOWN: There's a technical scenario? I mean, unless you put in place a policy 3 3 reason right now. The way the ADLU card is built, 4 that says that cannot be UNE POTS, why would it not 4 it physically splits out, electronically splits out 5 work? I can understand that you're not providing a 5 the voice. And I guess maybe I should have repeated data pipe back that has voice and data in the same the question. The question again was, is there a 6 7 pipe where I can do a soft switch. I understand technological reason why we can't send the voice 7 8 that statement. 8 down the OC-3c pipe versus anywhere else. When it 9 MR. SAMSON: Let me restate the 9 hits that ADLU card out at the RT site, there is a 10 10 physical splitter there just like any other DSLAM, question for the folks on the call and to make sure 11 I heard it right. Is your question will SBC provide 11 just like any other splitter arrangement. The 12 an unbundled switch port and an unbundled loop using 12 difference is on the back plane of the Alcatel 13 this network and over that loop provide both data 13 equipment, that voice is routed up to the common 14 and voice in the splitter functionality, in a sense 14 control arrangement where it is multiplexed onto the 15 a line-sharing arrangement on a UNE P-type 15 OC-3 for voice only. So, the data is split off and 16 configuration? Is that your question? 16 ridden over the ATM, if you will, cloud, the ATM 17 MR. NUTTALL: That's effectively it. 17 pipe, the OC-3c pipe. So, technologically the 18 MR. SAMSON: SBC's position from the 18 equipment won't do that right now. 19 19 MR. SAMSON: We need to take just a line-sharing order is that line sharing is not 20 real short break. We've been instructed every hour, 20 required to be provided in UNE P arrangements, and I 21 know a number of the companies that have been 21 so we need to take a five-minute break so they can 22 involved in our line-sharing trial, we've had a lot 22 switch the tapes on that. And it's right at 3:00 23 23 o'clock now. If we could take a brief five minutes of discussions around that. And so at this point 24 or less, then we'll restart as soon as we get our that would probably be SBC's position that that's 24

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tapes all swapped out.

Page 86 Page 88 1 (A recess was taken.) OCD is going to be an OC-3 and DS3. I can't speak 2 MR. CRUZ: Go ahead, please. 2 for the future. MS. BLAIN: Can you go to Slide 3 3 MS. BLAIN: Oh, okay. So, different 4 No. 8? This is Lucy Blain from Caprock 4 RTs will home into the same OCD. 5 Communications. Slide No. 8 where there's an OC-3 5 MR. BOYER: Right, that's a good 6 data going from the Litespan 2000 to the OCD. Can 6 point. There will actually be like probably 7 you explain exactly how the different ADLU DSL PVCs 7 anywhere from 15 and in some cases up to 25 or so 8 actually are going to be mapped to the OCD? Are 8 RTs going into that OCD, so if you have -- so, if 9 they going to be individual PVCs at the port on the 9 you bought a DS3 port like I indicated in the 10 left side of the OCD or is it going to be aggregated 10 presentation, we would allow you to buy a thousand 11 into one big PVC? How's that going to work? 11 at the maximum. You could put approximately a 12 MR. BOYER: You're asking how we're 12 thousand PVCs over that one DS3 port. If you had a 13 actually going to provision the PVC from the thousand end users out of those 22 or so, 20 or so 13 14 Litespan through the OCD? 14 RTs, that would be -- that would fill up the entire 15 MS. BLAIN: Because each end user 15 DS3. So, as the network grows and we get more DSL 16 from the get-go has a PVC. 16 providers out in the field for all the different 17 MR. BOYER: That's correct, each end 17 customers, you'll probably see a lot of that usage 18 user does have a PVC. I guess I wasn't very clear pick up. 18 19 in my presentation, but what will happen is, is that 19 MS. BLAIN: What quality of service 20 when you submit the LSR for the end user service 20 mappings are we allowed, or is it pretty much 21 order, we will have a new FID put on the LSR for the 21 whatever the Litespan can handle? 22 virtual parameters that are necessary to provision 22 MR. BOYER: Pretty much is relegated 23 the PVC. So, when you submit the LSR for the end 23 by the Litespan. 24 user service, we will ask the CLEC to put the 24 MS. BLAIN: Okay. 25 virtual path and channel indicator, virtual 25 MR. CRUZ: I know -- one second. Page 89

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parameters on the LSR and it will flow through 1 1 This gentleman over here to the right side had his 2 within our system to actually provision the PVC at 2 hand up for quite a white. 3 both ends of the service, so --3 UNIDENTIFIED SPEAKER: I also have a 4 4 MS. BLAIN: So, the option for us to question on the bridge when you're done with that. 5 MR. CRUZ: I'm sorry, could you take that into our ATM network is we have to have an 5 6 repeat your name? ATM connection at the left side of the OCD. 6 7 MR. BOYER: Right. 7 MR. DRAKE: William Drake with MCI 8 MS. BLAIN: And the only options we 8 Worldcom. You have three proposals there now. They 9 have you said was DS3 and OC-3? 9 do not cover all the needs or wants of MCI 10 MR. BOYER: That is correct. 10 Worldcom. Can I submit another proposal to you? 11 MS. BLAIN: No DS1 or IMA? MR. CRUZ: Sure. 11 12 MR. BOYER: You're talking about on 12 MR. DRAKE: All right. Do we do it 13 this side going from --13 at this web address that is on here or what? 14 MS. BLAIN: Yeah, on the left side. 14 MR. BOYER: You can e-mail me. 15 MR. BOYER: From here up to there? 15 MR. CRUZ: There's a -- on the 16 MS. BLAIN: Right, 16 accessible letter that went out to all the CLECs, 17 MR. BOYER: Yes, it's only OC-3 and 17 there was an e-mail address to Chris Boyer. If you DS3 today. 18 18 guys would like to present that to us, that would be 19 MS. BLAIN: Will there be DS1 or end 19 great. And we'll probably just have to phone up to 20 20 time DS1 capabilities later? Because really going the account team just to make sure they're plugged 21 21 in, but we can definitely entertain any options or out to DLCs, I don't see us ever chewing up a DS3 at 22 the DLC level, not with those subscriber caps. 22 recommendations you have as well. 23 MR. BOYER: I think at this point in 23 MR. DRAKE: Thank you. 24 time the only thing that we're building ports that 24 MR. MURTHY: Such as a recommendation are available on the device that we procured for the or any communication to you, would it be transmitted

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Page 92 1 to everyone who is already attending this in CLECs? 1 MS. SMITH: Do you have a time frame 2 MR. CRUZ: We can create minutes and 2 when this might be available? 3 3 include those in there --MR. KEOWN: I'm sorry, got two 4 MR. MURTHY: Yeah, please, yeah. 4 questions here. 5 5 MR. CRUZ: -- to make sure everyone's MR. CRUZ: Actually if we could take 6 on a -- I guess communicating well with all the 6 the call. And, Jo, I'll get back to your question 7 requirements. We just had a request from MCI that 7 in a second. Could you go ahead and state your name 8 they have a different option for us to consider and 8 on the bridge and the company you're with, please. 9 they're going to e-mail it to us and we've committed 9 MS. MAYS: I think it was both 10 10 it to distributing that in the minutes, so --Kristin and I. This is Christine Mays from North 11 MR. BOYER: With the options? 11 Point, and actually the previous gentleman pretty 12 MR. CRUZ: Yeah, with the options. 12 much asked the question that I was going to ask, 13 Yes, sir. 13 although I guess mine is a little bit more detailed 14 MR. WEINER: My name's Ken Weiner. 14 in the sense that what is the plan? I mean, you're 15 I'm with Birch Telecom, and my question has to do 15 saying that this product will -- will in theory be capable of handling any kind of DSL, but in truth, with the technology on that Litespan 2000. In terms 16 17 of the -- did you have requirements from CLECs to 17 and maybe this is the first part of my question, it 18 help evaluate which technology provider you would 18 seems that right now the Litespan 2000 is the 19 use and -- or what were the requirements you were 19 Alcatel equipment only supports ADSL. What is the plan for either taking CLEC input or allowing CLECs 20 matching against to pick the technology, and then 20 also what are the forward-looking plans for Alcatel 21 21 perhaps through the profile that you're talking 22 with respect to SDSL-type capability? 22 about in this new SOLID system to say what kinds of 23 MR. BOYER: James. I'll let James 23 cards they want put into the Litespan 2000 24 24 take that one. equipment, or is that solely going to be up to SBC? 25 25

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question for the folks on the call, James? MR. KEOWN: Yeah, the question was, do we take input from CLECs in choosing the technology that we're deploying in PROJECT PRONTO; and the second part of the question is, what is the forward-looking view for the Alcatel equipment as far as other flavors of DSL services. The answer to the first question is no. We did a fairly detailed evaluation of various

MR. CRUZ: Do you want to restate the

products and technologies looking at where we thought the industry was going. And at the time this -- and besides, we had some companies already had a lot of this equipment deployed, so this looked like the best alternative at the time that we were doing our technical evaluation of the product, so we landed on this particular technology. As to the second part of the question,

Alcatel is developing a variety of cards, HDSL-2, SDSL, I think they already have IDSL, so there are other flavors of DSL services that they're going to be deploying and rolling out. Now, whether those become products, I assume we will certainly take a look at those as offerings at some point in future. MS. GENTRY: When did you do that evaluation?

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MR. KEOWN: I'll take the first part,

and I'll turn the second part to Chris if you don't 1 2 mind. Alcatel has a migration strategy and a 3 deployment strategy. I just don't have that handy 4 at the time to tell you the dates and times when 5 SDSL, IDSL and those other flavors of DSL --6 MR. CRUZ: I think it's fall of 2000. 7 MR. KEOWN: I think that's right. I 8 think at 11.0 you'll start getting to HDSL-2 which 9 is late this year, I know, but I don't have a --10 since I don't have a detailed schedule I don't want 11 to be speculating on exactly what those dates are.

MS. MAYS: Can we get that from him? MR. KEOWN: Alcatel has that available. I think it's probably available on their public web sites.

MS. MAYS: That's fine. UNIDENTIFIED SPEAKER: Could you include it in the minutes?

19 MS. MAYS: So, what about the plans 20 going forward about how you're going to decide once Alcatel does release additional types of DSL how 21 22 you're going to decide what goes in there?

23 MR. BOYER: Can you repeat the 24 question, please? I don't think I quite understand your question.

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MS. MAYS: Well, I mean, right now the theory is the product will support all different kinds of DSL, but obviously you'll need different cards in the Litespan 2000 equipment to support the different DSL services.

MR. BOYER: Right.

MS. BLAIN: So, what is the plan from SBC's perspective? How will you decide what kinds of DSL will be supported out of the different RTs and what percentage and ratios and things like that?

MR. BOYER: Those are -- that's a good question. I don't have the answer to that. We have -- we have not -- if you're asking whether or not we've developed the process of how we're going to deploy different cards other than the existing ADLU card and how we're going to make the decision on where we're going to deploy them and what percentage are going to be deployed, I think we would have to evaluate that as we get more

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20 information down the road as the cards become 21 available and as different -- as different customers

22 of ours indicate that they want to deploy a

23 different type of technology, I think we have to

evaluate that at that time. I don't think I can --24

25 we can answer that now. Page 96

back from the loop qual to say loop too long but RT 2 available. 3

MR. BOYER: That's correct.

MS. MAYS: What happens at that point? If we want to not use the RT but continue to go ahead and provision our DSL service on the straight copper loop, even if the prequal system criteria believes that the loop is too long, right now we have the ability to sort of override that. On the LSR we can put what is called an as-is code or certain spec code to override it so that we really don't get the loop too long response back. Do you know what the -- will we be able to put that order through regardless of what message we get back?

MR. BOYER: Yes, you'll still have the same capabilities you have today. So, if you want to have the loop as is whether or not it's too long or not, you'll still be able to do that if you want to put it over the copper facility.

MS. MAYS: Okay.

MR. BOYER: There's no reason -- that

23 will not change.

MR. SIEGEL: What if the loop is not

too long and there's RT available?

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MS. MAYS: So, will it be by CLEC input? I mean, I guess, you know, right now you're claiming that the product supports all different kinds of DSL, but in reality that's not true.

MR. BOYER: Well, it's the product itself would support that, but yes, it is limited by the technology compatible with the Litespan. So, I think as new technologies become available with the Litespan, then we certainly will do what we can to make sure that we can offer different types of technologies. If you're asking whether or not we have a process to do that today, no, we do not have that. We're in the -- we're still in the middle of developing a process to support the technologies that the Litespan does support today. I think in the future we will look at what we deploy as the technology changes, and I certainly think we would

forward. MS. MAYS: Actually one other question then on something that was talked about earlier. And tell me if you already addressed this, but in talking about loop-to-loop qualification process or how that's going to mesh with this RT process, you mentioned that we'll get a response

want to have CLEC input into that as time goes

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MR. CRUZ: That was Howard Siegel, IP Communications. Howard Siegel, IP Communications.

MR. SIEGEL: Will we still be notified that there's an RT available?

MR. BOYER: I'm not sure. I really don't know because we're still looking into the whole process obviously.

MS. MAYS: I'm sorry. What was the question? How would we know if an RT --

MR. BOYER: The question was asked if the loop length is not too long, if it's less than the requirement that would make it outside the loop length, would you still be notified if an RT was available.

MS. MAYS: Yeah.

MS. LOPEZ: This is Ann Lopez from Rhythms. I want to go back over, and I tend to disagree with the statement that you don't have a process on how you would deploy --

MR. CRUZ: Technology?

MS. LOPEZ: -- new technology. And on page 18 you have on here that the CLECs would continue to have the option to develop new plug-ins with the vendors. And part of that would be as the vendors are developing this new -- this new type of

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plug-ins. My understanding is that the current process is that all of these new technologies go through your common systems to be evaluated for deployment.

MR. BOYER: Right.

MS. LOPEZ: And so I'm assuming, and you tell me if this is a wrong assumption, but I would assume that as these new cards come out from the vendors, that they would go through the existing common systems practice to go in evaluate and test them.

MR. BOYER: Yes.

MS. LOPEZ: Okay. My question then would be, as I'm getting head shaking up and down, my question would be is, if this is going through common systems, what is the time line of getting that back from common systems being evaluated? So, if I turn around and a vendor comes out with a new card and I say, oh, this is going to fit my needs perfectly, SBC, I want it, how long is it going to take for it to go over to common systems and be reevaluated for deployment?

MR. CRUZ: You know, Ann, this is Rod, and I'm not sure we have the experts in the room here that can address that. James and Marsha, Page 100

1 full with ADSL cards, what happens at that point 2 even if perhaps they're not being fully utilized. 3

You know, I mean, I see potential for a lot of open questions on this issue.

MR. CRUZ: So, to me the issue is 5 6 that there's a process that would talk through 7 actually identifying what technology would be 8 deployed in the network and then, secondly,

9 prioritization and actually what RTs would get this 10 and how and when. Does that frame it correctly?

11 MS. MAYS: I think that's right. 12 MR. CRUZ: Okav. Like I said, let me

13 run this by our technology deployment folks, and I 14 can respond to the minutes on that issue.

15 MR. SAMSON: I mean, we won't have 16 perfect answers on these because --

17 MR. CRUZ: I don't know anything 18 about it, so I can't --

19 MR. SAMSON: -- we're kind of in 20 Phase 1 and some of these questions are down the 21 road as new cards are developed how would we handle 22

MR. BOYER: To your question about whether or not we had a process developed or not and I was saying we did not have a process, what I'm

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1 unless you guys want to take a stab at it, we have a

2 whole group that works on technology deployment. As 3 you know, as an organization that unfortunately we

4 did not have the notion to invite them, bring them

5 to the meeting. So, it's an issue that I'll take

6 and respond to you guys in the minutes to say what's

7 the kind of process or the time line and what input 8

would it take from the CLECs on that, because I 9 think it's a good issue. I mean, I think if we're

10 asking for SBC, or actually not SBC, but the ILEC or the TELCO to own those ADLU cards, you guys have 11

some -- you know, some interest in the process of how we would determine and deploy new technology and what those -- you know, whether we're talking about

SDSL or HDSL or IDSL that's not currently supported

16 by the Alcatel manufacturer, so --17

MS. MAYS: I was just going to say there's sort of two pieces to the question. One is what Ann points out on the Slide 18 which is this overall initial the vendor comes out with something new and obviously you guys need to take a look at it and it's a good question to say how long that would take, but then there's a really specific nitty-gritty question about deciding which RTs those

new cards go in and if we already have RTs that are

getting at is we have not, term, developed a process

2 yet for us to put out a different vintage of card 3 than what exists today. So, what I think the lady

4 on the phone was getting to is the fact if somebody

5 wants to deploy an HDSL card, we have not developed

6 at this point a process to determine how we would 7 determine which RT to put that card in, whether or

8 not we would let a CLEC do that on one-by-one basis

9 with a customer line, whether or not we would 10 develop some sort of forecast in conjunction with

the CLEC to put enough of those cards out there to 11 support that infrastructure. Those are the types of 12

13 issues that probably we need to get answered I would 14 think.

MR. CRUZ: Mike.

MR. ZILLIBID: Yes, Mike Zillibid 16 (phonetic), Covad. I was wondering when it was that 17 you did the evaluation and determined that the 18 Alcatel Litespan was the product of choice and was 19 20 it at that time that the decision was made to 21 restrict the downstream to 1.5 and upstream to 384

22 and why was that -- why were those numbers arrived 23 at? 24

MS. FISCHER: Our decision to use 25 Litespan was made late last year. Was it early?

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